

SUPERFUND

Fact Sheet

COMMENCEMENT BAY/NEARSHORE TIDEFLATS
Tacoma, Washington



U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 10

MAY 1999

"Superfund cleanup efforts in Commencement Bay have reduced toxic metals to virtually the same levels as in uncontaminated ocean water," quoted The News Tribune.

The purpose of this meeting is to inform the public about the status of ongoing work at the waterways in Commencement Bay and to obtain input from participants on outstanding issues. For Thea Foss, the emphasis will be on reporting the status of completion of the technical work and the schedule for selection of a cleanup plan, including selection of a disposal site. For Hylebos, the Hylebos Cleanup Committee will present an overview of the proposed cleanup plan and disposal site for Hylebos sediments. Updates on the other waterways will also be provided.

Decrease of Toxic Metals in Commencement Bay

The Washington Department of Ecology announced in a press conference on March 10th, the results of a study showing a 90% decrease in concentrations of toxic metals in the waters of Commencement Bay. Ecology attributes this success to their

NOTICE OF PUBLIC MEETING

Please mark your calendars and join us on:
Monday, June 21st, 6:00 to 9:00 p.m.
at the
World Trade Center
3600 Port of Tacoma Road
Tacoma, WA

Commencement Bay Urban Bay Action Team (UBAT), which is 50% funded by EPA's Superfund program. UBAT has inspected every facility that drains into the Commencement Bay waterways and has completed cleanups at 64 of the 70 facilities where cleanup was necessary.

Businesses along the waterfront have spent an estimated \$96 million on source-control projects since 1984. The City of Tacoma spent about \$100 million over the years upgrading the North End and the Central wastewater treatment plants. Control of these sources of contamination is necessary before EPA can address contaminated sediments in the waterways.



Background

The Commencement Bay Nearshore/Tideflats (CB/NT) Superfund site is located on the eastern shore of Puget Sound in Tacoma, Washington. It was added to the National Priorities List in 1983 following environmental studies that indicated areas of hazardous chemicals in the sediments. These areas are being addressed by the U. S. Environmental Protection Agency (EPA) and the State of Washington Department of Ecology, because clean sediments are important to a healthy environment.

The EPA determined that a combination of upland source control, sediment confinement, natural recovery, site use restrictions, and monitoring are the most appropriate remedies for achieving the CB/NT cleanup objectives. The remedy selected incorporates four options for confinement of sediments: In-place capping, confined aquatic disposal, nearshore disposal, and upland disposal. The choice of confinement option ultimately applied to a sediment problem area is to be made in the pre-remedial design phase, and is to be based on the status of available remedial technologies evaluated during pre-remedial design, the availability of disposal sites, and economic and development considerations.

Source control and monitoring will continue until EPA and Ecology determine that all major sources have been controlled to the extent that sediment recontamination is not predicted to occur, or the source is in compliance with all known, available, and reasonable methods of treatment.

Thea Foss and Wheeler-Osgood Waterways

Work continues towards resolution of the issues identified by EPA in comments on the City of Tacoma's Round 3 Report. The issues that present the greatest challenge to moving forward with a remedy include: source control and recontamination potential; mitigation for in-water disposal at the St. Paul site to compensate for the proposed fill work at this site; and identification of an effective remedy for the head of the Thea Foss. Various efforts are underway to allow EPA to present a remedy for the waterway to the public sometime early in the fall of 1999.

With respect to source control, the City is in the process of pulling together the information that will describe the actions it has taken to control sources that impact the municipal storm drains which drain into the Thea Foss and Wheeler-Osgood waterways. Ecology is in the process of reviewing the investigations conducted to date at the upland Coal Gas site in order to select an effective remedy that will not pose a threat to recontamination of the waterway. The City is conducting further investigations at the head of the Thea Foss to identify a cleanup option that will effectively deal with the mass of contamination there, including petroleum seeps.

EPA is actively working with the Natural Resource Trustees and the National Marine Fisheries Service (NMFS) to identify the appropriate type and level of mitigation to compensate for the St. Paul fill. A couple of efforts are underway simultaneously to help



determine the best option for habitat mitigation/restoration. One effort is the completion of a baywide assessment to be conducted by a salmon expert in conjunction with input from the Natural Resource Trustees and the public to identify the highest priority habitat functions and areas needed in Commencement Bay to support recovery of chinook and other salmon species. The other effort is a feasibility study to determine whether and at what cost the freshwater channel concept to connect the Puyallup River with the head of Middle Waterway is feasible. EPA has also begun informal consultation with NMFS in order to comply with the requirements under the Endangered Species Act.

All of these efforts are underway and it is expected that they will come together this summer. A technical memo addressing key issues is to be provided to EPA by the City of Tacoma in August 1999. The revised final Round 3 Report will be issued by the City in November 1999. EPA expects the technical memo to contain many of the results and conclusions needed to support selection of the remedy for Thea Foss so that it can select the remedy coincident with the final submittal of the Round 3 Report. Likewise, it is expected that efforts to define the appropriate level of mitigation will also be concluded so that EPA can move forward with presenting a remedy, including disposal site, to the public for review and comment this fall.

For more information, please contact **Christine Psyk**, EPA Project Manager, at (206) 553-1748, e-mail - psyk.christine@epamail.epa.gov.

Hylebos Waterway

In December 1998 and January 1999, EPA, several other government agencies and members of the public reviewed and provided comments on the Hylebos Cleanup Committee's (HCC) Pre-Remedial Design Evaluation Report (Evaluation Report). The Evaluation Report identified potential natural recovery areas, dredging areas, and capping areas in the Hylebos Waterway. It also provided an analysis of potential disposal sites for dredged contaminated sediments. EPA provided comments to the HCC in February 1999 and the HCC is currently working to revise the report.

One of the major issues raised by reviewers was a concern that the cleanup plan only addresses surface sediments. Reviewers were concerned that contaminated subsurface sediments may become exposed in the future due to ship scour, storm events, and future dredging projects. Reviewers pointed out that regular maintenance dredging needed for ship passage in the Hylebos Waterway should be combined with the Superfund cleanup. This would allow for a more complete cleanup of the waterway, and any additional contaminated sediments could be disposed of in the Superfund disposal sites. The possibility of combining the Superfund cleanup with maintenance dredging has been discussed in several meetings with the U. S. Army Corps of Engineers (Corps), the agency responsible for maintaining channel depths for shipping, the HCC, and EPA. These discussions are ongoing.

The HCC's report estimated that 725,000 cubic yards of contaminated sediments will



require dredging and disposal. This volume is likely to grow, especially if the maintenance dredging is included. It is now likely that two disposal sites will be needed for Hylebos sediments.

EPA has asked the HCC to address all of these issues in their revised report. Since the Corps has not yet made a decision about maintenance dredging, EPA has asked that the revised report contain two options, one for doing the Superfund cleanup without the maintenance dredging, and one for doing a combined project. The HCC will submit their revised report for review on May 24, 1999. This report will be available for review at the public information repositories listed at the end of this fact sheet. **Please submit any comments to Allison Hiltner by mail or e-mail (hiltner.allison@epamail.epa.gov) by June 24, 1999.** EPA hopes to resolve all remaining issues, including compliance of the cleanup with the Endangered Species Act, this summer and have a cleanup plan ready for public comment in late summer or fall.

For more information, please contact **Allison Hiltner**, EPA project manager, at (206) 553-2140, e-mail - hiltner.allison@epamail.epa.gov.

The Hylebos Wood Debris Group

The Wood Debris Group (Manke Lumber, Louisiana Pacific, and Weyerhaeuser) has completed its investigation of wood debris in the upper turning basin of the waterway. The group is working to finalize its Cleanup Study Report and prepare a Corrective Action Plan for public review and comment by mid-summer. Ecology will issue its own fact sheet

when the document is available for public comment. The group is also preparing an Operations, Maintenance & Monitoring Plan which addresses, among other subjects, stormwater and upland source control, in-water log handling practices and rafting areas. During February, the group conducted a pilot study where some whole logs were removed from the waterway to determine if and how they might be re-used after cleanup occurs.

For more information, please contact **Russ McMillan**, Ecology Project Manager, at (360) 407-6254, e-mail - rmcm461@ecy.wa.gov.

Occidental Chemical Removal Action on the Hylebos Waterway

Removal actions are taking place at two major cleanup areas at the Occidental Chemical site, located adjacent to the waterway near the mouth of the Hylebos. The Embankment Area extends from the waterway inland about 100 feet, and Area 5106 (the area of subtidal contamination) extends approximately 100 feet into the water at low tide.

. The Embankment Area: Characterization of the Embankment Area is essentially complete, and Occidental Chemical has finalized the "Embankment Area Characterization Report," which summarizes sampling and analyses results obtained to date. A copy of this report is currently available in the information repositories listed at the end of this fact sheet. The finalization of this report completes the sampling and analysis phase of the project. Occidental Chemical will soon begin the Engineering Evaluation and Cost Analysis (EECA), which evaluates potential cleanup



options for the bank as well as Area 5106 discussed below. This document will be made available for public comment as early as December 1999.

- **Area 5106:** As stated in the previous fact sheet, EPA and the Army Corps of Engineers (COE) were evaluating the potential water quality impacts from dredging subtidal sediments contaminated with high levels of organics. EPA has determined that dredging of Area 5106 contaminated sediments is viable and can be conducted safely if certain engineering controls are exercised. Occidental Chemical is continuing to evaluate a wide range of engineering controls that may be applied to further reduce risks posed from temporary water quality impacts. Occidental Chemical has also completed a preliminary evaluation of a range of treatment technologies for Area 5106 sediments once they are dredged. One purpose for this evaluation is to determine if the results of previous pilot tests are sufficient to proceed forward to design, or if additional treatability studies may be required. Through review of this evaluation and all site data collected to date, EPA and Occidental Chemical have determined that further bench scale tests are necessary to ensure sufficient treatment. Bench scale tests will likely be performed this summer in advance of the draft EECA.

- **Community Relations Plan Addendum:** An addendum to the Community Relations Plan for Commencement Bay has been drafted for the Occidental Chemical site. The Plan includes a short site description and background, current activities, and planned community involvement activities. The activities include written updates to the

Trustees, Citizens for a Healthy Bay (CHB) and internal team members, site visits for the Trustees and CHB, fact sheets announcing public comment periods, and public meetings to discuss issues, if requested.

Please call **Ken Marcy**, EPA Project Manager, (206) 553-2782, e-mail - marcy.ken@epamail.epa.gov if you are interested in discussing the activities planned for this site. If you would like a copy of the Community Relations Plan Addendum, please call **Jeanne O'Dell**, Community Involvement Coordinator, (206) 553-6919, e-mail - odell.jeanne@epamail.epa.gov.

Middle Waterway

Results of sampling in the waterway completed by Middle Waterway Action Committee (MWAC) in 1998 have been presented to EPA in a data report. EPA and MWAC are discussing data gaps to be filled with the second round of sampling this year. MWAC and EPA are also coordinating with the City on the planned restoration work near the head of the waterway, the dioxin sampling outside the waterway mouth, and opportunities for a shared sediment disposal site.

For more information, contact **Elly Hale**, EPA Project Manager, at (206) 553-1215, e-mail - hale.ellie@epamail.epa.gov.

Olympic View Restoration Area

The Olympic View Restoration Area is at the end of the peninsula between Thea Foss and Middle Waterways. Samples collected



previously by the City of Tacoma, and reported to EPA this past spring, showed elevated dioxin levels in sediments. The City sampled the area again this January to better assess the extent of dioxin and other contaminants in the area and plans follow-up sampling later this spring. Initial results confirm an area of elevated dioxin near Puget Sound Plywood that may require cleanup.

For more information, contact **Elly Hale**, EPA Project Manager, at (206) 553-1215, e-mail - hale.ellie@epamail.epa.gov

Asarco Smelter Cleanup

The preparation of the on-site containment facility (OCF) will begin this year. This will include removing trees, shrubs and other vegetation from the area, any concrete, and compacting the soil by dropping huge weights on the OCF area. Other activities planned for 1999 include excavating and stockpiling contaminated soil from the copper refinery. This material will go into the OCF after it is constructed.

For more information, contact **Kevin Rochlin**, EPA Project Manager, at (206) 553-2106, e-mail - rochlin.kevin@epamail.epa.gov.

Asarco Sediment Cleanup

The Sediments/Groundwater Task Force is in the final stages of completing their review and analysis to determine if the ongoing and planned cleanup activities at the smelter site will result in potential recontamination of future remediated sediments (yacht basin/off-shore) or exceed the standard set for the

water column, once that upland effort is concluded. The agency is still on target to propose clean up alternatives for the sediments, late this fall and a Record of Decision early next year. The next step in the process will be the issuance of the Task Force final reports next month for general availability.

For more information, contact **Lee Marshall**, EPA Project Manager, at (206) 553-2723, e-mail - marshall.lee@epamail.epa.gov.

Ruston/North Tacoma Residential Cleanup

Cleanup of residential properties began again in April for the sixth year. One hundred and fifty properties are scheduled for cleanup in 1999. The total number of completed properties from 1994 to 1998 is 579.

For more information, please contact **Mary Kay Voytilla**, EPA Project Manager, at (206) 553-2712, e-mail - voytilla.marykay@epamail.epa.gov.

Tacoma Landfill

The Tacoma landfill was causing contamination of area groundwater and generating landfill gas which could be dangerous to the surrounding community. The entire area, excluding a 31-acre central area of the landfill which will remain open until the end of 2004, was capped. A groundwater extraction and treatment system and a landfill gas management system were also completed. The landfill cap and the treatment systems continue to operate



satisfactorily, and groundwater quality outside the boundary of the landfill continues to improve. The extracted groundwater now meets the established cleanup levels, and the water treatment system has been shut down. The extracted groundwater is being discharged to the City's sanitary sewer system. As part of the landfill gas management system, a portion of the landfill gas is now being used to generate electricity as opposed to being wasted in the flaring system.

A golf driving range and a learning center are being developed on a portion of the site and are scheduled to open in mid 1999.

For more information, please contact **Bob Kievit**, EPA Project Manager, at (360) 753-9014, e-mail - kievit.bob@epamail.epa.gov.

South Tacoma Field

Cleanup of the 260-acre parcel of land located in the southwestern part of the City of Tacoma began in 1998. The contaminated soils were excavated and transported off-site, treated on-site and placed in a consolidation area, or excavated and consolidated on-site, and the area was vegetated in the spring of 1999. Groundwater will continue to be monitored and data indicates that contaminant levels are greatly decreased.

For more information, please contact **Cami Grandinetti**, EPA Project Manager, at (206) 553-8696, e-mail - grandinetti.cami@epamail.epa.gov.

Well 12 A

As of September 1998, the Groundwater and Extraction Treatment System has removed 13,428 pounds of volatile organic compounds from treated groundwater. The Vapor Extraction System, which operated from August 1993 to May 1997 recovered 37,000 pounds of solvent and removed 5,000 cubic yards of waste sludge from the soil. However, these two cleanup strategies are not meeting the cleanup standards set in the 1985 Record of Decision. EPA is planning to conduct a Focused Feasibility Study in the next year to determine what additional actions are needed.

For more information, please contact **Piper Peterson Lee**, EPA Project Manager, at (206) 553-4951, e-mail - lee.piper@epamail.epa.gov.

Information Repositories

Written information and technical documents are available for review at the following locations:

IN TACOMA

- Tacoma Main Public Library
1102 Tacoma Avenue South
Northwest Room
- Citizens for a Healthy Bay*
917 Pacific Avenue, Suite 406

**Please call for an appointment, if information is needed after business hours. (253) 383-2429*

IN SEATTLE

U.S. Environmental Protection Agency
1200 Sixth Avenue
7th Floor Records Center

Internet Information

Fact sheets for the Commencement Bay Nearshore/Tideflats Superfund site are available at the following Internet address - <http://www.epa.gov/r10earth/offices/oec/cercla.html>.

For more information about EPA Region 10's web site, please contact **Beth Kunz** at (206) 553-2592, e-mail - kunz.beth@epamail.epa.gov.

For More Information

Contact the representatives listed in this fact sheet or one of the following representatives. **All EPA representatives can be reached on our toll free number at 1-800-424-4372.**

Jeanne O'Dell, EPA Community Involvement Coordinator, Seattle - (206) 553-6919

Dawne Chapman, Ecology Public Involvement, Lacey - (360) 407-7233

To ensure effective communication with everyone, additional services can be made available to persons with disabilities by contacting one of the EPA representatives.



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